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ABSTRACT

This paper attempts to re-examine the role of the agricultural educator and the agricultural researcher during the decade of the 1970's. Based on the national goals, the magnitude of the problems of providing adequate programs, and the findings of research, the authors contend that agricultural education should assume the responsibility for providing the leadership to reconstruct vocational education for rural people in America. Studies have shown that rural youth generally have a lower level of aspiration than urban youth. They tend to be reluctant to migrate to locations where occupational opportunities are more plentiful, and in view of the declining opportunities for farm employment, there are special problems in providing alternatives for rural youth. Research strategies for the decade ahead may be divided into short-range and long-range strategies. Short-term strategy for research in rural vocational education is to expedite the attainment of national goals through program modification, and long-range strategy should concentrate on developing new programs required to attain the national goals. Relevant vocational education must be provided those people living in rural areas. (GEB)

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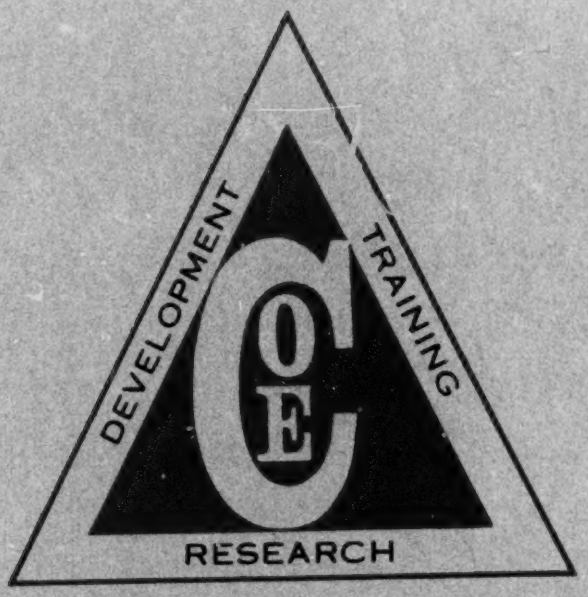

RESEARCH AND DEVELOPMENT STRATEGIES IN AGRICULTURAL EDUCATION FOR THE SEVENTIES

JOHN K. COSTER

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CENTER FOR OCCUPATIONAL EDUCATION

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Occasional Paper No. 4

1969

CENTER FOR OCCUPATIONAL EDUCATION
North Carolina State University at Raleigh
Raleigh, North Carolina

PREFACE

This paper was originally prepared for presentation at the Central Regional Research Conference in Agricultural Education held at the University of Illinois, Urbana, Illinois, July 29, 31, 1969. The paper represents an attempt to re-examine the role of the agricultural educator, and more particularly the agricultural education researcher, during the decade of the 1970's. However, the implications of the paper are broader than simply agricultural education and they relate to the total problem of occupational education for rural Americans. Although the focus of attention throughout the decade of the sixties has been on the urban environment, it is an incontrovertible fact that some percentage of the problems of urban America can be traced directly to failures in the rural sector to hold migration and provide proper training for those who will migrate. If the problems of education in America are to be solved, they will not be solved piecemeal by attending to only one segment of the population. Rather, we must begin to recognize that our national system of education is, in fact, a system and that in order to set it right, we must attend to the entire problem, not attack it in bits and pieces. Hopefully, this paper will demonstrate the contribution that rural vocational education can make to the total problem of improving the American educational enterprise.

The Center extends its appreciation to the following people who prepared reviews of this paper prior to its final publication:

Dr. William J. Brown, Jr., Director, Division of Research, North Carolina State Department of Education.
Dr. Joseph R. Clary, Executive Director, State Advisory Council on Vocational Education, North Carolina.
Dr. Charles H. Rogers, Research Associate, Center for Occupational Education, North Carolina State University at Raleigh.

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John K. Coster
Director

RESEARCH STRATEGIES FOR THE SEVENTIES

Introduction

Whether we like it or not, agricultural education has occupied a defensive position since World War II. And whether we admit it or not, much of our energy during the past quarter of a century has been directed toward defending the position. Agriculture, so our critics have said, is a declining industry, and a nation ought not allocate its scarce resources to the development of a declining industry. In response to this criticism, we have taken two basic positions: (1) the consolidation of funds and the increased size and magnitude of farm operations require a higher degree of educated managerial ability than did the operations of farms prior to farm consolidation, and (2) employment in agricultural industry, broadly defined, has not declined, but rather has shifted to the application of technology and specialization; to the industrial complex. We have made these positions abundantly clear to ourselves; there are times, however, when it may be questioned whether many persons outside our fraternity were listening. Our position, unfortunately, has neither been strengthened by the Department of Labor's system of classifying occupations nor by the Department of Commerce's system of classifying industries.

Whether we admit it or not, much of our research during the past two decades has been conducted to support the defensive position. When university officials threatened to curtail the enrollment of high ability students, and suggested that they substitute mathematics and science for vocational agriculture in high school, we turned to research as a defense mechanism, and conducted numerous studies designed to inquire as to whether

students who had vocational agriculture in high school fared less well in college than students who had progressed to college on an academic curriculum. When the curtailment of funds for agricultural education in public schools was threatened due to the decline both in the numbers of persons engaged in farming and the percent of the total labor force engaged in farming, we turned to research to demonstrate that the knowledges and skills developed through vocational agriculture were thought to be useful in agricultural occupations other than farming. When the issue arose as to whether education in agriculture should be continued under the provisions of Federal law, the Panel of Consultants on Vocational Education commissioned two economists at North Carolina State University to conduct a study to determine projected employment possibilities in occupations in agriculture other than farming (Bishop and Tolley, 1963). Neither research nor the researchers are criticized; what is to be examined is the defensive mood which generated the need for new knowledge.

The problems of agricultural education, and the defensive position to which we have alluded, are a product of success. We have participated in a training enterprise augmented by technological advances which have maximized efficiency and minimized manpower requirements in agriculture. Our accolade has been our near annihilation.

We demonstrated our capacity for adaptability in the decade of the 60's. We altered our objectives, expanded our clientele, established our programs in urban centers, and extended our programs to postsecondary institutions. In the late 50's and early 60's, agricultural education produced a cadre of professionals who questioned existing programs and

instituted work directed toward new programs. These professionals paved the way for an expanded program in agricultural education, buttressed by research which, fortunately, anticipated the changes in agricultural education highlighted in the report of the Panel of Consultants on Vocational Education (Panel of Consultants on Vocational Education, 1963) and manifested in the Vocational Education Act of 1963.

The challenge of adaptability of the 60's was met. The place of research in agricultural education was established in many institutions and the research findings led to new programs, new curriculums, and new solutions to ever-pressing problems.

The Challenge of the Seventies

We now turn our attention to the decade of the seventies. The changes that were effected in agricultural education during the decade of the sixties may be wholly inadequate for the decade of the seventies. The tenor of the documentation that was produced in the sixties--the report of the Panel of Consultants on Vocational Education, the report of the National Advisory Council on Vocational Education, and House Report 1647 and Senate Report 1386--clearly indicate that a reconstruction, not a modification, of vocational education was desired. Our contention is that agricultural education should be reconstituted as rural vocational education, and assume the responsibility for providing the leadership to reconstruct vocational education for rural people in America. This contention is based on (1) the national goals for vocational education, (2) the magnitude of the problems of providing adequate programs of vocational education in rural areas, and (3) the findings of research which indicates the changing nature of the educational requirements of rural people.

The National Goals.

The direction of continuing development in agricultural education may be inferred from national goals set by Congress for vocational education. The goals, both explicit and implicit, are reflected in the national legislation covering vocational education. The explicit goals are quite clear, and they are contained in the declaration of the most recent act, the Vocational Education Amendments of 1968.

> It is the purpose of this title to authorize Federal grants to States to assist them to maintain, extend, and improve existing programs of vocational education, and to develop new programs of vocational education, and to provide part-time employment for youths who need the earnings from such employment to continue their vocational education on a full-time basis, so that persons of all ages in all communities of these states--those in high school, those who have completed or discontinued their formal education and are preparing to enter the labor market, those who have already entered the labor market but need to upgrade their skills or learn new ones, those with special educational handicaps, and those in post-secondary schools--will have ready access to vocational training or retraining which is of high quality, which is gainful employment, and which is suited to their needs, interests, and ability to benefit from such training (Vocational Education Amendments of 1968, Part A, Section 101).

Nothing could be more clear than the fact that this action represents a demand on the part of society that each individual be provided with the requisite skills and knowledge which will enable him to perform effectively as a productive member of American society.

The implicit goals set for vocational education are closely related to, and interwoven with, the national goals of alleviating poverty, and underemployment, and maintaining a healthy dynamic economy. The implicit goals, themselves, may be stated in terms of a debt. That is, society owes to each person who is capable of participating in the economic productivity of the nation, an opportunity to obtain the necessary skills and knowledge enabling him to enter into and progress in a career based on the occupational demands of society and the attribute system of the individual. Further, there is interest that vocational education function as a more viable entity in assisting our society in that task of becoming a greater and more progressive nation (Committee on Education and Labor, 1968).

These explicit and implicit goals should be recognized for what they are, not simply abstract notions, but rather a mandate from society, expressed through the medium of national legislation, which is intended to guide our direction. It does not mean that basic research should be abandoned, nor that projects not related to this direction are of no value; however, it does establish a national priority which all of us in vocational education should recognize, and all of us should keep firmly in mind in our contemplation of research strategies.

The Magnitude of the Problem

Bearing in mind the challenge, and the national goals, let us examine the size of the problem with which we are faced, and review some of the facts to be considered. The first consideration is the absolute size of the rural population in America. In 1964, the rural population was estimated at 55.3 million people (President's National Advisory Commission on Rural Poverty, 1967, Page 3), a number exceeding the total population of the United States in 1880. If this population were constituted as a nation within itself, this nation of rural Americans would replace the United Kingdom in ranking as the tenth largest in the world (Brittanica Book of the year 1965). According to the findings of the President's Advisory Commission on Rural Poverty, 14 million of these rural people were living in poverty, a fact which the commission referred to as a "national disgrace" (President's National Advisory Commission on Rural Poverty, 1967, Page 41).

The second fact to be confronted is that of migration. Since the earliest days of the cities, the population of urban areas has been sustained and augmented through the migration of persons from rural

areas to urban centers. With this heavy rural to urban migration still continuing, rural school units have still not designed programs to prepare persons for occupations which are not located in the local community. The Advisory Council on Vocational Education emphasized this point when it stated that "Rural schools have given little attention to the occupational needs of students who migrate to urban centers" (Subcommittee on Education, 1968). Thus, not only have rural schools failed to provide appropriate education for all members of their community but through their contribution of unskilled people to the urban centers, they have helped to contribute to an urban situation which is now draining funds and energies from the rural environment.

The third consideration is that of the non-migrant. Within this group lie the bulk of the 14 million poor people mentioned in the report of the Commission on Rural Poverty. These 14 million people constitute a disproportionate 40.9 percent of the total poor population in the United States. Contrary to a popular impression, not all of these rural poor are Negroes nor do they all live on farms. In fact, of the 14 million rural poor, 11 million are white and only one family in four lives on a farm (President's National Advisory Commission on Rural Poverty, 1967, Page 3).

Finally, we must confront the present inadequacy of vocational education in rural areas. Manpower needs in American Society are in transition. A changing industrial and occupational mix is in evidence. The shift from a primarily blue-collar and agricultural labor force to a more sophisticated technologically oriented Labor Force continues, both within the Agricultural Field and outside it.

In all the vocational acts beginning with the Smith-Hughes Act of 1917, the Congress has been responsive to the shift in manpower needs. The George-Barden Act of 1946 was enacted to meet changes in labor force demands arising since 1917. The Vocational Education Act of 1917 came as the result of shifting manpower needs and funds were made available to provide training programs for occupational not covered by the previous Acts.

The Vocational Education Act of 1963 embodied two basic conceptual changes in vocational education that were recommended by the Panel of Consultants on Vocational Education:

1. That vocational education must be redirected from training in a few selected occupations to preparing all groups in the community for their place in the world of work, regardless of occupations, and

2. That vocational education must become responsive to the urgent needs of persons with special difficulties that prevent them from succeeding in a regular vocational program.

The Advisory Council on Vocational Education stated that "There is little evidence that either of these major purposes has been accomplished this far." It further declared that "The second main objective--to serve the youths with special needs--has hardly been touched" (Subcommittee on Education, 1968, Pages 33-34).

The implications of the two new basic purposes which were introduced into the vocational education system of the nation, for rural and urban peoples alike, is that operation of programs have not been consistent with national intent as manifested in the act. This condition is one indication of the inadequacy of rural programs of vocational education.

A second indication of inadequacy of rural problems is lodged in the inherent limitations of rural schools to provide adequately for the preparation of youths and adults for employment in the contemporary labor force. The Advisory Council stated that:

> Rural high schools tend to be too small to offer more than agriculture, home economics, and office education. Most of their students will ultimately seek urban jobs but have no preparation for urban life. This deficiency has been particularly serious for rural southern Negroes whose resultant plight can be observed in most large cities of the land (Subcommittee on Education, 1968, Pages 33-34).

The Advisory Council pointed out that vocational education has been most inadequate for those persons who need it most. The President's Advisory Commission on Rural Poverty concurred and stated unequivocally that rural people have been shortchanged by an inadequate educational system. Subsequently, in the report, the Commission deplored the poor quality of occupational education in public schools, and recommended:

> That the Federal Government in cooperation with the States develop and expand occupational education programs that will enable students to adapt to a changing society. Such programs should be developed at the elementary, high school, and post high school levels (President's National Advisory Commission on Rural Poverty, 1967, Page 48).

The Changes in Rural Educational Requirements.

There is a large body of literature presently available detailing the characteristics of rural people, and particularly rural youth. Much of this literature deals, either explicitly or implicitly, with the changing nature of rural America and the changes that may be forecast for rural education. The most clearly visible problem in rural America today relates to the changing occupational structure. Manpower requirements for farming and ranching and the number of opportunities for

entry into these occupational areas is declining (Bishop and Tolley, 1963). Moreover, presently employed workers are faced with changes in the occupational structure which include increased relative demands for workers in the professional and managerial, and clerical and sales occupational groups, and decreased demands for workers in the unskilled occupational group (Roe, 1956). Even though there are employment opportunities for rural youth in both agricultural and non-agricultural occupations, there is reason to believe that these opportunities will not use all the available human resources. There is evidence to show that despite a surplus of labor in rural areas, the rate of movement of industry into these areas has not kept pace with the availability of labor (Ruttan, 1956). In addition to the unemployment in rural areas resulting from this combination of factors, there is also a condition of underemployment in these areas. This condition may actually represent a more critical waste of human resources than unemployment.

Although these changes in the occupational structure of rural areas are well documented and highly visible, they represent only the small tip of a very large iceberg, so far as educators are concerned. Although we have known for some time that the abilities and aptitudes of youth appear to be normally distributed in the population without regard to rural or urban environments (Anastasi, 1937; Freeman, 1939), there seem to be strong differences in the aspirations of rural and urban youth, and in their occupational attainment and achievement. There have been many studies of the aspiration levels of rural youth (cf. Burchinal, 1961; Haller and Miller, 1963; Sewell, 1963 and 1964; Sewell and Orenstein, 1965), which generally indicate a higher level of

aspiration for urban youth than for rural and a higher level in the rural environment for those youth who intend to leave the farm in contrast to those youth planning to remain in farming occupations. Other studies (cf. Bauder and Burchinal, 1965; Elder, 1965) have demonstrated a lower educational and occupational achievement for rural youth than for their urban counterparts.

Another important factor in the changing nature of rural America is the mobility demanded of an industrialized labor force. In general, studies of rural youth have revealed a reluctance to migrate to locations where occupational opportunities are more plentiful (Chinoy, 1955; Schwarzweller, 1964a and 1964b; Stephenson, 1957). This reluctance could be an important factor in aggravating the conditions of unemployment and underemployment presently being felt in rural areas.

Even in the face of declining opportunities for farm employment, there seems to be a special problem in providing alternatives for rural youth. Studies by Arthur, et al. (1964), Bishop and Tolley (1963), and Burchinal, et al. (1962), among others, have pointed up the lack of interest of boys planning to farm in acquiring education beyond high school. This tendency may have serious consequences for the problem of retraining rural people for non-farm employment.

Even though educators can hardly be held responsible for the lack of interest on the part of industry in moving into rural areas, they can assist measurably in the creation of a work force which will be adaptable to the needs of industries which can be attracted. For this we need to develop well trained, highly motivated, achievement oriented and mobile youth.

In a time when agriculture was the very foundation of rural life, agricultural educators provided the educational leadership in rural areas. Theirs was the responsibility to educate rural people. As we can see from the national goals, and the findings of research, the characteristics of rural areas and rural people are changing. Agriculture is still an important part of the rural life, but it is only a part. However, even though there has been a decline in the relative importance of agriculture, there has been no decline in the importance of leadership; people in rural areas still require sound educational leadership. Although agricultural education may have to change its traditional subject matter it need not, indeed, should not, change its traditional role. The cadre of agricultural educators presently established, if reformed as rural vocational educators with a subject matter changed enough to serve the needs of the changing rural character, can continue to provide the effective leadership necessary.

If we are correct in formulating this challenge to agricultural educators, then, what are the directions which this new area we call rural vocational education should take?

Research Strategies in the Decade Ahead

Strategy is an excellent word to describe what should be the posture of vocational education research during the next decade. As Webster's Seventh New Collegiate Dictionary points out, strategy is: "the art of devising or employing plans or strategems toward a goal." It is important to consider this definition, because it points out something which is not always obvious. That is, strategy implies not only methodology, but direction. In the past, the individual researcher has more or less charted his own course. This course has been set in the direction of basic research, that is, the generation of new knowledge without reference to a specific set of problems or conditions. Research, *per se*, generates its own goal. Applied research, contrarily, is goal oriented; that is the goals of the research activity are directed toward an external, rather than an internal, orientation of the research. The objective of this type of research is the solution of specific problems, or the attainment of specific goals.

Obviously, research in education must encompass not only basic and applied research, but also developmental, experimental, and pilot and demonstration projects; innovative and exemplary programs; and dissemination and research utilization. Although basic research is often high-risk, with no readily discernable pay-off, it often does eventually provide a solution to more practical problems. Certainly, any viable research and development program must provide for a sound balance between basic research and research activities directed toward the solution of more immediate problems. However, it must be recognized

that basic research, because it is high-risk research, generates very little support from pragmatically oriented administrators or program managers. When fiscal resources are scarce, and when priorities for research must be carefully weighed, such research may generate little or no support from funding agencies. From a purely practical point of view, in a time when federal spending on vocational education research is being reduced, it is apparent that more and more of our research will be applied research.

The strategies themselves may be divided into short-range and long-range strategies. This division occurs between that which must be done immediately, and that which may accommodate developmental time.

Short-Range Needs.

The short-term strategy for research in rural vocational education is to expedite the attainment of national goals manifested in the 1963 and 1968 acts. The justification for the support of research under Part C of the Act is to invent new solutions for the problems that arise in the implementation of the concepts of the act, and the justification of Part D of the act, Exemplary Programs and Projects, is to utilize the products of research in developing new models for vocational education, according to the Senate Report (Committee on Labor, 1968).

The immediate strategy for research in rural vocational education is to concentrate on research and development programs and projects and on research utilization programs and projects that will provide immediate answers to the problems inherent in the implementation of the Vocational Education Amendments of 1968. This posture is not intended to postpone the initiation of long-range research programs addressed to issues and problems that ultimately must be resolved, but the major strategy must be one of immediacy.

The key to immediacy is the identification of crucial and penetrating problems whose resolution is essential if the programmatic goals are to be attained. Here a strategy for strategies is needed. Research in vocational education has been criticized mildly for its fragmentation and for its lack of relevance. Relevance is a matter of degree, and, as has been indicated previously, is not of immediate concern to the scientist engaged in basic research. In goal-oriented research, encompassing research supported under the provisions of the acts of 1963 and 1968, however, relevance clearly is an issue. Relevance simply means that the research activity is directed toward an operational problem which is militating against the attainment of the goals of the program. There are, however, two dimensions to the problem of relevancy. One dimension relates to the extent to which the program manager can identify and define problems for which solutions are needed in the implementation of the program. The second dimension relates to the extent to which the researcher can operationally define the problem, and design an appropriate program to arrive at a solution. Obviously a team effort is required, and obviously a communication linkage must be established between the program manager and the researcher. The establishment of a communication linkage is one of the most difficult problems to be resolved in the strategy for strategies; it is also one of the most urgent. Indeed, the resolution of this problem is vital to the participation of the university community in the vocational education research program. Research institutes, generally, have demonstrated more flexibility, adaptability and expertise in coping with this problem than the research staff at the universities.

In the development of short-range strategies, developmental programs and projects and research utilization programs and projects should be accorded high priority. This strategy does not deny the need for the production of new knowledge, but does affirm that primary attention should be given to the utilization of the knowledge that is available in inventing new solutions and developing new models to resolve the immediately pressing problems. Such a strategy for design and development should automatically generate the problem areas where long-range research programs are needed.*

Developmental programs and projects have been defined by both Bushnell and Swanson. Bushnell describes developmental studies as those which are:

> . . . usually directed at the introduction of new innovations into a specific environment in order to modify the outcomes of whatever occurs in that environment. Development programs seek to invent and engineer new solutions while research seeks to add to our storehouse of knowledge (Bushnell, 1969, Page 19).

Similarly Swanson states that:

> Developmental programs differ from research by the fact that outcomes are known and describable. The objective may be stated in terms of performance specifications. The purpose of developmental projects or programs is to produce materials, techniques, processes, or implements which will accomplish pre-specified objectives. Unlike research projects, developmental projects cannot tolerate negative results (Swanson, 1968, Page 76).

The immediate problems toward which developmental programs may be oriented include the development of new curricula, models of organization and administration for vocational programs in rural areas, models of vocational education in rural areas, evaluative instruments,

*For an excellent statement on design, see Simon (1969), Pages 55-83.

and occupational guidance systems.

Research utilization may be related to developmental programs, but its most recent manifestation has been expressed in Part D of the Vocational Education Amendments of 1968, Exemplary Programs and Projects. Although exemplary programs may emerge from the intuitive experience of the developer, there is an overriding concern that exemplary programs, which are expected to develop new models for vocational education, be rooted in pertinent research findings. Exemplary programs, therefore, may be thought of as programs designed to put research into action, or as research utilization programs. Policies for managing exemplary programs may vary; state funds made available under Section 142 (d) of the act may be used to support exemplary programs in local education agencies, whereby developmental programs may be engineered at universities where a more sophisticated technology is available.

The basis of the immediate strategy is to undertake programs and projects where findings of research in the social and behavioral sciences may be utilized in the solution of problems, and to concurrently identify problems that necessitate long-range research programs. The research cited in the previous section may form the basis for a starting point.

Long-Range Needs.

The short-range strategies have been oriented primarily toward program modification, that is, toward the modification of programs of vocational education to serve the vocational training needs of an expanded clientele without reference to the traditional classifications of vocational education programs. The long-range strategies are directed toward program development, that is, toward the development of new pro-

grams that will be required to attain the national goals. The distinction is a matter of degree; the assumption is that some problems can be attacked immediately based on the existing knowledge that is available, whereas other problems may require a long-range program of research and development.

One of the most significant changes in the Vocational Education Amendments of 1968, which is more implicit than explicit, is the expanded concept of vocational education to occupational education. Occupational education is mentioned initially in the act in Part D, and if the Senate Report is considered, relates to the development and introduction of appropriate programs at the junior high school level designed to acquaint pre-adolescents with occupational opportunities and the world of work (Committee on Labor and Public Welfare, 1968, Page 10). The House Report presented a more direct statement:

> . . . The General Subcommittee on Education has concluded that the following five ideas recommended by the Advisory Council (on Vocational Education) deserve serious consideration: (1) any dichotomy between academic education and vocational education is outmoded; (2) developing attitudes, basic educational skills and habits are as important as skill training; (3) prevocational orientation is necessary to introduce pupils to the world of work and provide motivation; (4) meaningful career choices are a legitimate concern of vocational education; (5) vocational programs should be developmental, not terminal, providing maximum options for students to go on to college, pursue postsecondary vocational and technical training, or find employment (Committee on Education and Labor, 1968).

The Center for Occupational Education at North Carolina State University has formulated an even broader definition of occupational education:

> Occupational education encompasses educational programs at elementary, junior high, senior high and postsecondary levels designed to assist each person in becoming familiar with and exploring the world of work; and in selecting, preparing for, entering into, and becoming

adjusted to a career pattern consistent with his attributes and with occupational demands of society. Occupational education, therefore, includes educational programs specifically designed to prepare the individual for initial entry into a career, for continued progress in his career, and for changing to new careers. In addition, occupational education includes programs designed to expand occupational horizons, develop attitudes and work habits, provide for exploration of the world of work, and provide information on which the individual can act in making career choices in light of alternatives available to him. Further, occupational education provides for the articulation of experiences from elementary schooling through junior and senior high school levels to post-secondary and adult programs; for the articulation between career choice and preparation for employment; for the articulation between school and work; and for the articulation between general and occupational education.

The long-range implications of further development in occupational education are immense. The immediate need is for a model of occupational education which includes subsystems based on function or purpose. Articulation among the several agent levels or groups of persons to be served, between career choice and preparation for employment, between school and work, and between academic and vocational education must be effected.

The long-range strategies include not only research and related activity but also professional development programs which are expected in the future to draw heavily on research as inputs into training.

Toward a New Tomorrow

The Vocational Education Amendments of 1968 authorize the design and implementation of programs to deal with the dilemmas facing the United States today in its changing world of work. Some jobs have disappeared and others have been altered. The relocation of industry and the shifts in market demands have contributed to a flux in manpower needs which must be met in rural and urban areas alike.

The task ahead for educators who serve rural areas is to devise new approaches to providing a relevant vocational education to the people it serves. This task is especially critical in light of the trends and issues cited which were mentioned earlier in the paper. Reimbursement policies need to be changed to relieve local school units of the economic responsibility to prepare youths for jobs in urban centers. Broader training must be offered to high school youths which will increase their opportunities for employment in a broader labor market. For example, new models are needed to enhance the level of aspiration of rural youth and to acquaint them with employment opportunities available in contemporary society. Dropout rates must be reduced, and participation in postsecondary programs of vocational and technical education must be increased. Adult Basic Education must be articulated with vocational training so that adults may be trained or retrained for the jobs that are available. Program development for rural people must be attuned to individual interests, aptitudes, needs and subsequent occupational and educational requirements.

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